

Plant Status of Fukushima Daiichi Nuclear Power Station

October 10, 2011
Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B)>

Status of highly concentrated accumulated radioactive water treatment facility and storage tank facility

[Treatment Facility]

- 6/17 20:00 Full operation started.
- 6/24 12:00 Treatment started at desalination facilities
- 6/27 16:20 Circulating injection cooling started.
- 8/7 16:11 Evaporative Concentration Facility has started full operation.
- 8/19 19:33 We activated second cesium adsorption facility (System B) and started the treatment of accumulated water by the parallel operation of cesium adsorption instrument and decontamination instrument. At 19:41, the flow rate achieved steady state.
- 10/4 11:38 Isolated circulating operation of the decontamination instrument has started in order to purify the water in the waste treatment water tank.*

*On September 15, an increase in the radioactivity concentration of the processed water was detected after the water was processed in the decontamination instrument. According to the investigation thereafter, the increase was estimated that it was caused by the influx of highly radioactive sludge water into the waste water treatment tank when the water in the primary despondence tank was drained to change the stirrer.

[Storage Facility]

From June 8, big tanks to store and keep treated or contaminated water have been transferred and installed sequentially.

Accumulated water in vertical shafts of trenches and at basement level of building

Unit	Draining water source → Place transferred	Status
2u	·2u T/B → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·10/6 13:48 ~ Transferring
3u	·3u T/B → Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)]	·9/30 10:00 ~ Transferring
6u	·6u T/B → temporary tanks	·10/10 Transferring not planned

Transfer to:	Status of Water Level (as of 7:00 on 10/9)
Process Main Building	Water level : O.P.+ 2,937 mm (Accumulated total increase : 4,154 mm) 138 mm decrease since 10/9 7:00
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level : O.P.+ 2,781 mm (Accumulated total increase : 3,507 mm) 282 mm increase since 10/9 7:00

Water level at the vertical shaft of the trench and T/B (as of 10/10 7:00)

	Vertical Shaft of Trench	T/B	R/B
1u	O.P. <+850mm (No change since 10/9 7:00)	O.P. +4,951mm (2mm decrease since 10/9 7:00)	O.P. +4,500mm (41mm decrease since 10/9 7:00)
2u	O.P. +2,866mm (2mm decrease since 10/9 7:00)	O.P. +2,909mm (2mm decrease since 10/9 7:00)	O.P. +2,996mm* (as of 10/9 16:00)
3u	O.P. +3,362mm (5mm decrease since 10/9 7:00)	O.P. +3,153mm (22mm decrease since 10/9 7:00)	O.P. +3,300mm (15mm decrease since 10/9 7:00)
4u	-	O.P. +3,170mm (5mm increase since 10/9 7:00)	O.P. +3,187mm (5mm increase since 10/9 7:00)

[Unit 3] 10/3 10:59~10/9 10:22 We started transferring the accumulated water from the condenser to the basement in the turbine building.

* Due to the water gauge failing, we put the most recent measured value.

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

*Results of nuclide analysis of seawater, sampled on October 9 at 4 points around the Fukushima coastal area and 5 offshore points, are all ND for the 3 major nuclides (iodine-131, cesium-134 and cesium-137).

<Cooling of Spent Fuel Pools> (as of 10/10 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
1u	Circulating Cooling System	Operating from 8/10 11:22	23.5
2u	Circulating Cooling System	Operating from 5/31 17:21	26.0
3u	Circulating Cooling System	Operating from 6/30 18:33	24.7
4u	Circulating Cooling System	Operating from 7/31 10:08	33

[Unit 4] 8/20~ We started operation of desalinating facility of the spent fuel pool.

10/6, at 10:32 pm alarm of the Circulating Cooling System went off and it stopped its operation automatically (Still not operating at present).

<Water Injection to Pressure Containment Vessels> (as of 10/10 11:00)

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel	Pressure of Primary Containment Vessel
1u	Injecting freshwater (Feed Water System: approx. 3.8m ³ /h)	71.6	73.6	122.9 kPaabs
2u	Injecting freshwater (Feed Water System: approx. 3.6m ³ /h CS System: approx. 7.0 m ³ /h)	78.6	85.3	114 kPaabs
3u	Injecting freshwater (Feed Water System: approx. 2.2m ³ /h CS System: approx. 8.0 m ³ /h)	71.6	73.9	101.5 kPaabs

[Unit 4] [Unit 5] [Unit 6] No particular changes in parameters.

<Others>

- 4/10 ~ Clearance of outdoor rubbles by remote control to improve working conditions.
- 6/3 ~ 10/4 Implemented restoration works of port related facilities.
- 6/28 ~ Main construction work for installing the cover for the reactor building of Unit 1
- 8/10 ~ 9/9 Implemented setting up iron framework of the cover for the reactor building of Unit 1
- 9/10 ~ Conducting installment of wall panel for cover of reactor building of Unit 1
- 10/7 ~ We are spraying purified accumulated water at Unit 5 and 6 continually in order to prevent dust scattering and potential fire outbreaks from the cut down trees.
- 10/7 11:44 ~ 14:03 Conducted dust sampling at the opening of indoor equipment hatch and within the truck bay door of Unit 1 reactor building
- 10/8 12:12 ~ 13:22 To install a gas controlling system for RPV of Unit1, we replaced hydrogen with nitrogen in Containment Vessel Spray Piping of Unit 1. After the operation, we confirmed increase in hydrogen concentration, and so we are planning to do the replacement work again tomorrow (10/9).
- 10/9 10:25 ~ 11:30 We replaced hydrogen with nitrogen and confirmed that hydrogen concentration decreased to 0.7% (11:20) at the 84A valve and 1.2% (12:40) at the 46A valve.
- 13:09 ~ 14:14 As the hydrogen concentration was more than 1% at the 46A valve, we replaced hydrogen with nitrogen again, and confirmed that it decreased to 0.5% (13:39) at the 84A valve and 0.9% (14:15) at the 46A valve. After that, we conducted trend monitoring of the situation of the hydrogen concentration. (As for the valve A84, we did not cutoff because we used it as a hydrogen replacement line.)
- 17:07 ~ 22:30 By filling with nitrogen while discharging hydrogen from the 46A valve, we cut off the piping arrangement (0.5% at the 46A valve (17:02)). We confirmed that the hydrogen density after the cutoff work is substantially zero and there is no environmental impact.

END